

MODULE IX
POST-CLOSURE CARE

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MODULE IX

POST-CLOSURE CARE

IX.A. APPLICABILITY

- IX.A.1. The Permittee shall monitor the closed hazardous waste management units in accordance with the conditions of this module. This module shall remain in effect for all landfill cells after closure of the Facility. Upon closure, any further disposal of hazardous waste in any closed unit is prohibited.
- IX.A.2. The post-closure period shall include monitoring, reporting and maintenance of waste containment systems in accordance with the requirements of R315-8 and this permit.
- IX.A.3. This module shall not apply to the surface impoundment if the unit is clean closed in accordance with R315-8.
- IX.A.4. The Permittee shall provide post-closure care of Hazardous Waste Landfill Cells 1, 2, and 3 which have been closed, and Industrial Waste Landfill Cells 1 & 2, and Hazardous Waste Landfill Cells 4, 5, 7, TSCA\RCRA Cell B/6 and any future hazardous waste landfill cells constructed and used to dispose of hazardous waste or TSCA\RCRA waste.

IX.B. GENERAL LANDFILL POST-CLOSURE CARE CONDITIONS

- IX.B.1. The Permittee shall conduct all post-closure care activities in accordance with the post-closure plan (Attachment II-7) and this permit.
- IX.B.2. The Permittee shall provide post-closure care for each landfill cell for a period of at least 30 years. Table IX-1 shall list the times post-closure care began for each landfill cell. The post-closure care period for each landfill cell shall begin on the date of closure certification. The Executive Secretary can shorten or extend this time if it is determined that the shortened or extended period is sufficient to protect human health and the environment per R315-8-7.
- IX.B.3. Closed landfill cells shall have a final cover that:
 - IX.B.3.a. Minimizes the migration of liquids through the landfill cell;
 - IX.B.3.b. Functions with minimum maintenance;
 - IX.B.3.c. Promotes drainage and minimizes erosion or abrasion of the cover;
 - IX.B.3.d. Accommodates settling and subsidence so that the cover's integrity is

maintained; and

IX.B.3.e. Has a permeability less than or equal to the permeability of the landfill cell's bottom liner system.

IX.B.4. The Permittee shall:

IX.B.4.a. Maintain the integrity and effectiveness of the final cover;

IX.B.4.b. Continue to operate the leachate collection and removal system until leachate is no longer detected for four consecutive sampling events;

IX.B.4.c. Maintain and monitor the groundwater monitoring system as described in Module VII and its attachments.

IX.B.4.d. Prevent run-on and run-off from damaging the final cover; and

IX.B.4.e. Protect and maintain surveyed benchmarks.

IX.C. SECURITY

IX.C.1. The Permittee shall comply with the following security conditions:

IX.C.1.a. The fence with locking gates surrounding the closed facility on all sides, which prevents unauthorized entry, shall be maintained throughout the post-closure care period.

IX.C.1.b. Signs written in English which read "DANGER, UNAUTHORIZED PERSONNEL KEEP OUT" shall be posted on the gates and the fence line of the facility perimeter at intervals of no more than 120 feet between signs. These shall be maintained throughout the post-closure care period. The signs shall be legible from a distance of at least 25 feet.

IX.C.1.c. All security equipment shall be routinely inspected throughout the post-closure care period. These inspections (e.g.: fence, signs of vandalism, etc.) are included in Attachment II-3.

IX.C.1.d. Damaged security equipment shall be noted in the inspection record. Any problem shall be corrected as soon as possible after the problem is discovered.

IX.D. INSPECTIONS

IX.D.1. Inspections shall be conducted during the post-closure care period in accordance with Attachment IX-1. All records of inspections and remedial actions shall be retained in the Operating Record.

- IX.D.2. Permittee shall maintain an inspection checklist that follows the outline, narrative, and schedule found in the inspection procedures of Attachment IX-1.
- IX.D.3. Permittee shall comply with Condition II.F.1.
- IX.D.4. The Permittee shall report any spill of hazardous waste, contaminated media, or material which, when spilled, becomes waste, to the Executive Secretary in accordance with R315-9-1.
- IX.D.5. The Permittee shall inspect the closed portions of the facility within 24 hours after a storm event, and document such in the inspection log as a storm event inspection. For the purposes of inspections, a storm event shall be defined as precipitation in excess of 0.5 inches per 24 hours.
- IX.D.6. The Permittee shall install and maintain, on their premises, equipment appropriate to measure rainfall for the purpose of determining storm events. The Permittee can, at his option, submit a proposal to use an approved local weather recording station.
- IX.D.7. The Permittee shall inspect and incorporate as part of the inspection checklist, required by Condition IX.D.2., all groundwater monitoring wells as outlined in Attachment IX-1 on a quarterly basis, as specified below:
 - IX.D.7.a. Inspect for damage to the casing and cover security;
 - IX.D.7.b. Inspect for tampering of lock or monitoring well cap; and
 - IX.D.7.c. Insure that the wells are accessible and visible to all appropriate personnel.

IX.E. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

- IX.E.1. The Permittee shall maintain at the Facility for the duration of the post-closure care period, the following documents and amendments, revisions, and modifications to these documents:
- IX.E.2. The permit that contains post-closure care requirements for the landfill cells;
- IX.E.3. The closure plans for the container storage area and landfill cells;
- IX.E.4. Certification of closure for the container storage area and landfill cells;
- IX.E.5. Completed inspection checklists as required by R315-8-2.6(d), i.e. at least three years;
- IX.E.6. Post-closure monitoring records, to include groundwater monitoring records and analytical results; and,
- IX.E.7. All applicable portions of the Operating Record requirements of R315-8-5.3.

IX.F. RECORDKEEPING AND REPORTING

- IX.F.1. The Permittee shall submit reports as required by Module VII, to the Executive Secretary documenting post-closure monitoring activities and results from analyses of samples collected in compliance with post-closure monitoring requirements.

IX.G. REQUIRED SUBMISSIONS UNDER THIS MODULE

- IX.G.1. The Permittee shall submit the following documents to the Executive Secretary as specified by Table IX-2.

TABLE IX-1*Post-Closure Start Dates, by Cell Number*

LANDFILL CELL NUMBER	DATE LANDFILL CELL BEGAN POST-CLOSURE CARE
Hazardous Waste Landfill Cell 1	August 21, 1991
Hazardous Waste Landfill Cell 2	August 21, 1991
Hazardous Waste Landfill Cell 3	March 21, 1996
Hazardous Waste Landfill Cell 4	
Hazardous Waste Landfill Cell 5	
RCRA/TSCA Landfill Cell B/6	
Hazardous Waste Landfill Cell 7	
Industrial Waste Landfill Cell 1	January 14, 1998
Industrial Waste Landfill Cell 2	January 14, 1998

TABLE IX-2*Required Submissions*

REQUIRED SUBMISSION	DATE OR EVENT
Post-closure Inspection Log Checklist	Within 30 days following certified closure of landfills 1 and 2, and 3: IWC-1 and IWC-2 and any cells added to this Permit in the future.
Subsidence survey measurements	15 days after completion of measurements
Certification of closure	60 days following completion of closure
Survey plat indicating dimensions and location	60 days following completion of closure
Monitoring well completion reports	90 days after well completion
Well plugging and abandonment methods	30 days prior to plugging and abandonment
Analytical results	60 days after completion of analysis